

REMARKS

In view of the above amendments and following remarks, Applicant respectfully requests reconsideration and allowance of the above-identified application.

Claims 1-4, 6-12, 17-20 and 24 are now pending in this application, with Claims 1, 6-8, 10 and 17-19 being independent. By this Amendment, Applicant has amended Claims 1, 4, 6-8, 10 and 17-20, canceled Claims 5, 13-16 and 21-23, and added new Claim 24. Claims 6-8, 10-12, 14 and 17-19 are allowed. Applicant submits that the changes to allowed Claims 10 and 17-19 merely put those claims in even better form, and do not affect the allowability thereof.

Claims 3 and 4 stand objected to as being dependent on a rejected base claim, but the Office Action indicates that they would be allowable if rewritten in independent form. Applicant has left those claims in dependent form inasmuch as Applicant believes independent Claim 1, their common base claim, is allowable for the reasons set forth below.

Claims 20-23 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the description enablement requirement. Applicant has amended Claim 20 to attend to the matter noted in the Office Action as giving rise to this rejection, and has canceled Claims 21-23. Accordingly, Applicant requests withdrawal of this rejection.

Claims 1, 2, 5, 13, 14 and 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,060,113 (Banno, et al.) in view of U.S. Patent No. 6,312,864 (Tokai, et al.). Claim 9 stands rejected under 35 U.S.C. § 103 as being

unpatentable over Banno and Tokai, et al. in view of U.S. Patent No. 5,760,538 (Mitsutake, et al. '538). Claim 15 stands rejected under 35 U.S.C. § 103 as being unpatentable over Banno and Tokai, et al. in view of U.S. Patent No. 5,594,296 (Mitsutake, et al. '296). Claims 20-23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Banno and Tokai, et al. in view of U.S. Patent No. 5,593,335 (Suzuki, et al.). Applicant traverses these rejections.

As recited in independent Claim 1, Applicant's invention is directed to a method of producing an image-forming apparatus in which a face plate having phosphors of the three primary colors is opposed to a rear plate comprising a plurality of electron-emitting devices. Each electron-emitting device has a first electrode and a second electrode. A plurality of column-directional wirings and row-directional wirings are connected to the plurality of electron-emitting devices, and the phosphors of the three primary colors are disposed in the same order repeatedly along the column direction.

The method includes a step of arranging a plurality of first electrodes and second electrodes on the rear plate such that the first and second electrodes of each of the electron-emitting devices are opposed to each other in the row direction. The method also includes, in part, a step of forming the plurality of column-directional wirings, wherein each of the column-directional wirings connects commonly a plurality of the first electrodes, and a step of forming the plurality of row-directional wirings, wherein each of the row-directional wirings connects commonly a plurality of the second electrodes.

Also, intervals of the row-directional wirings are larger than those of the column-directional wirings.

The Office Action cites the Banno, et al. patent as showing, in Figures 8A and 8B, that an interval spacing of row wirings is greater than an interval spacing of column wirings. Applicant respectfully disagrees. Figures 8A and 8B of that patent merely show an example of a face plate structure of an image-forming apparatus. Those figures do not show the specific structure of electron-emitting devices and wiring arrangements for connecting the electron-emitting devices, which would be positioned below the face plate. Specifically, Figure 8A shows a phosphor arrangement pattern. In that pattern, black members 1091 between the pixels are arranged in only a row direction. This arrangement of black members is discussed at column 16, lines 48-59, of the Banno, et al. patent. Such an arrangement is well known in the art and merely describes the technical background of a face plate.

Applicant submits that such an arrangement of phosphor and black members on a face plate does not suggest the arrangement of electron-emitting devices provided below such a face plate or the relative intervals of column and row wirings used to connect such electron-emitting devices. In particular, Figure 13 of the Banno, et al. patent shows an arrangement of electron-emitting devices that could be used with face plates as shown in Figures 8A and 8B. As can be seen, the arrangement shown in Figure 13 does not correspond to the pertinent features of the present invention in which the intervals of row-directional wirings are larger than those of column-directional wirings.

Further, Applicant submits the Banno, et al. patent does not describe that the phosphors of the three primary colors are disposed in the same order repeatedly along the column direction or that the first and second electrodes of each of the electron-emitting

devices are opposed to each other in the row direction. This relationship between the arrangement direction of the first and second electrodes of the electron-emitting device and the arrangement direction of the three primary colors is not suggested by the Banno, et al. patent.

The Tokai, et al. patent is merely cited in the Office Action as describing a process of depositing a photosensitive film comprising conductive metal particles. The Mitsutake, et al. '538 patent is merely cited as describing the use of spacers with row electrodes. The Mitsutake, et al. '296 patent is merely cited as describing forming column wires by a photolithographic step and forming row wires by a screen-printing step. The Suzuki, et al. patent is cited in the Office Action as describing the connection of a modulating circuit and a scanning circuit to the row and column wire sets. Applicant submits that these documents fail to remedy the deficiencies discussed above with respect to the Banno, et al. patent.

Accordingly, Applicant submits that the Banno, et al., Tokai, et al., Mitsutake, et al. '538, Mitsutake, et al. '296, and Suzuki, et al. patents, taken alone or in combination, fail to disclose or suggest at least the features of a plurality of electron-emitting devices, each having a first electrode and a second electrode, and a plurality of column-directional wirings and row-directional wirings being connected to the plurality of electron-emitting devices, with phosphors of the three primary colors being disposed in the same order repeatedly along the column direction, and a plurality of first electrodes and second electrodes being arranged on a rear plate such that the first and second electrodes of each of the electron-emitting devices are opposed to each other in the row direction,

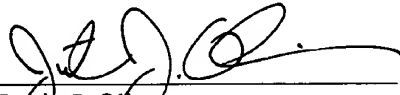
wherein intervals of the row-directional wirings are larger than those of the column-directional wirings, as recited in independent Claim 1.

For the foregoing reasons, Applicant requests withdrawal of the rejections under 35 U.S.C. § 103.

The remaining claims in this application not already allowed are dependent claims which depend from the independent claims discussed above, and are thus patentable over the documents of record for reasons noted above with respect to those independent claims. In addition, each recites features of the invention still further distinguishing it from the applied patents. Applicant requests favorable and independent consideration thereof.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,


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